Alkyl Alcohols CB-Cl3 Category - Environmental Defense Comments

(Submitted via Internet 7/10/02)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for Alkyl Alcohols C6-Cl3 Category.

ExxonMobil Chemical Company has prepared the test plan for the aliphatic alcohols category. It follows a previous test plan on the corresponding aliphatic acetates. In general, the test plan was well written and easy to follow. We do, however, note the absence of information on the uses and applications of these substances so it is not possible to evaluate the potential for environmental contamination or human exposure. While the HPV program does not require this kind of information, it does help put the avaiiable hazard data in context.

The proposed category for the C6-C13 alcohols includes 6 CAS numbers but a much greater number of individual chemicals is included depending on whether the alcohols are linear or branched. We agree with the proposed category based on EPA guidelines for category formation including structural analysis, physiochemical properties, common breakdown products, and the high probability of similar toxicological responses, which would be expected to vary in an incremental and predictable fashion within the category.

The test plan proposes that no new tests for human health effects be conducted. While we support the proposal for read-across interpolation of data for the repeat dose and developmental studies, we are troubled by the absence of data for reproductive toxicity. Both repeat dose and developmental endpoints have data for 4 of the 6 CAS numbers covered under the test plan including both high and lower molecular weight substances. In the case of reproductive toxicity, the sponsor asserts that the existence of repeat dose and developmental studies obviate the need for a reproductive study according to OECD guidelines. While this may be appropriate for individual substances, we believe that this is too much of a stretch for broad-based categories such as the C6-Cl3 alcohols and not scientifically justified. Therefore, we recommend that reproductive toxicity studies be conducted on 2 members of the proposed category, preferably a lower molecular weight substance such as hexanol and a higher molecular weight representative such as the C11-C14 alcohols.

The database for ecotoxicity and environmental fate seems adequate for the HPV challenge program although we agree with the sponsor's proposal to conduct an algal toxicity study. The studies reported in the robust summaries clearly support the statement that acute toxicity to aquatic species increases proportionately with increasing chain length of the C6-C13 alcohols.

Thank you for this opportunity to comment.

George Lucier, Ph.D.
Consulting Toxicologist, Environmental Defense

Karen Florini
Senior A-ttorney, Environmental Defense